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S/N 09/049861

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	TANAKA ET AL.	Examiner:	D. Davis
Serial No.:	09/049861	Group Art Unit:	2754
Filed:	3/27/98	Docket No.:	JA9-96-088
			501.356US01

Title: DISK DRIVE DISK WITH LANDING ZONE HAVING TEXTURED AND UNTEXTURED REGIONS

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<u>David W. Lynch</u> Name	<u>[Signature]</u> Signature

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Respectfully submitted,  
Altera Law Group, LLC  
10749 Bren Road East, Opus 2  
Minneapolis, MN 55343  
952-912-0539

Date: July 18, 2000

By: [Signature]  
David W. Lynch  
Reg. No. 36,204

DWL/tmj



S/N 09/049861

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Applicant: TANAKA ET AL.

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APPELLANTS' REPLY TO THE EXAMINER'S ANSWER

BOX AF

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This Reply to the Examiner's Answer is presented in support of the Appeal Brief filed March 7, 2000, and the Appeal filed January 4, 2000, from the final rejection of Claims 5-12 of the above-identified application, as set forth in the final Office Action mailed October 8, 1999.

1. THE EXAMINER'S ARGUMENT THAT THE PRIOR ART ANTICIPATES A LANDING ZONE HAVING A TEXTURE FREE ZONE WHICH FACES A MINIMUM FLY HEIGHT AREA OF THE AIR BEARING SURFACE OF THE SLIDER WHEN THE SLIDER IS LANDING AND ALSO HAVING A CIRCUMFERENTIAL BUMP ZONE ADJACENT TO SAID FREE ZONE. THE BUMP ZONE BEING FORMED WITH BUMPS PROTRUDING

**FROM THE SURFACE OF SAID DISK, THE FREE ZONE HAVING NO BUMPS IS INCORRECT**

In his Answer, the Examiner asserted that prior art discloses "a circumferential bump zone adjacent to said free zone, the bump zone being formed with bumps protruding from the surface of said disk, the free zone having no bumps". Thus, according to the Examiner, the prior art anticipates Appellants' invention as recited in the claims because the area between the bumps within the circumferential bump zone is equated with the free zone adjacent to the circumferential bump zone as recited in the claims.

However, Appellants' argue that this claim construction clearly is erroneous. Moreover, Appellants' argue that this claim construction clearly is inconsistent with the plain meaning of the claim language.

The free zone clearly does not refer to the area between the bumps as the "free zone." However, the area between the bumps cannot be said to define a zone as the term zone is used throughout the specification and in the claims themselves. The claim clearly states, for example in claim 5, that the "circumferential bump zone" is "adjacent to said free zone." While an area between any two bumps may be adjacent to those two bumps, this area cannot be said to be "adjacent" to a circumferential bump zone because this area is within the circumferential bump zone. Thus, according to the claim language, the free zone must be a separate zone that is distinct from the circumferential bump zone.

Further, Claim 9 includes the step of "reducing a rotation rate of the disk to allow a portion of the air bearing surface not having the lowest flying height to contact the

textured area of the landing zone first. " The Examiner's interpretation of the area between the bumps as the free zone is clearly wrong.

The free zone must be a separate zone that is distinct from the circumferential bump zone, wherein the free zone is under the lowest flying height area while the disk is rotating to allow another portion of the slider that is angled at a higher position to contact the textured area first.

If the claim is read as the Examiner proposes, a contradiction arises since it is impossible for any other area of the slider other than the lowest flying area to be the first contact point if the free area is commingled with the bump area. If any bumps are passing under the lowest flying point of the slider as the disk slows down, these bumps will hit the lowest flying area.

As stated in the Appeal Brief, all of the claims remaining in the case depend from claims 5 and 9 and, therefore, are similarly distinguishable over the references on the basis given above. However, the dependent claims add significant additional elements which further distinguish over the prior art. For example, claim 6 includes the applicants' teaching that the minimum fly height area is on the inner rail. The references cited by the Examiner have no teaching on this point. Claim 7 includes the applicants' teaching that the bumps have a height above the surface such that the minimum fly height area of the slider does not touch the surface of the disk during landing. Method claims 10 and 11 parallel claims 6 and 7. Claims 7 and 11 further establish the falsity of the Examiner's reading of the "area between the bumps" as the free zone by adding that the minimum fly height area does not touch the surface of the disk during landing. As noted above the bumps will hit the minimum fly height area of

the slider rather than the free zone as inappropriately defined by the Examiner.

Accordingly, the cited references do not teach, disclose or suggest Appellants invention. Thus, Appellants respectfully request that the Board overrule the Examiner's rejections.

### **SUMMARY**

Based on the above arguments, it is submitted that the rejections of the pending claims were erroneous, and allowance of all pending claims is requested.

Please charge any additional fees or credit overpayment to Altera Law Group, LLC, Deposit Account No. 50-1038.

Respectfully submitted,

Altera Law Group, LLC  
10749 Bren Road East, Opus 2  
Minneapolis, MN 55343  
952-912-0539

Date: July 18, 2000

By: 

David W. Lynch  
Reg. No. 36,204